CLAIMS

1. (Previously presented) A method of computerized control of an implantable medical device deployed in a patient, comprising the steps of:

providing a centralized computing resource external to a patient having a physiologic model;

transmitting via a network communication link a set of historical physiologic data previously gathered from the implantable medical device to a centralized computing resource external to a patient;

performing a computerized analysis of the transmitted set of historical physiologic data using the physiologic model that produces a set of results; and

making a computerized determination of a set of instructions comprising an implantable medical device therapy regimen based at least in part on the set of results from the analysis of the set of historical physiologic data; and

transmitting via the network communication link or a separate network communication link the set of instructions to the implantable medical device for execution by the implantable medical device in accordance with a firmware- or a software- implemented executable routine.

2. (Original) A method according to claim 1, wherein the network communication link or the separate network communication link comprises a radio frequency link, a hard-wired link, an infrared-band link, or other type of a wireless communication link.

3. (Original) A method according to claim 2, wherein the network communication link or the separate network communication link comprises a hybrid link.

4. (Previously presented) A method according to claim 3 wherein the hybrid link comprises a radio frequency link from said implantable medical device to a

routing instrument, and a secondary network link from the routing device to the central computing resource.

5. (Original) A method according to claim 4 wherein the secondary network link is a direct dial up connection.

6. (Original) A method according to claim 4 wherein the secondary network link is an area network.

7. (Original) A method according to claim 6 wherein the area network is a large area network.

8. (Original) A method according to claim 6 wherein the area network comprises a wide area network.

9. (Original) A method according to claim 6 wherein the area network comprises at least a one of an internet-, an intranet-, an extranet- or a world wide web-based network.

10. (Original) A method according to claim 4, wherein the secondary network communication link comprises an asynchronous link.

11. (Original) A method according to claim 4, wherein the secondary network communications link comprises a synchronous link.

12. (Original) A method according to claim 1, wherein each of the two or more implantable medical devices comprises one or more of: a pacemaker, a pacemaker/cardioverter/defibrillator, a defibrillator, an oxygen sensing device, a nerve stimulator, a muscle stimulator, a drug pump, a neurological stimulator, a physiological signal recorder or an implantable monitoring device.

13. (canceled)

14. (Previously presented) A computerized control system linking an implantable medical device deployed in a patient to a centralized external computer via a data communication network, said computerized control system providing computerized control of the implantable medical device deployed in the patient, comprising:

a central computing resource accessible by the data communication network, said central computing resource including a physiologic model and being operable to (a) analyze a set of patient data recorded by the implantable medical device and transmitted via the data communication network using the physiologic model, and (b) make a computerized determination of a set of instructions comprising an implantable medical device therapy regimen based on the set of results from the analysis of the set of historical physiologic data;

at least one routing instrument capable of wireless communication with said implantable medical device deployed in a patient, said at least one routing instrument being capable of performing a data communication sequence with the data communication network.

15. (Original) A computerized information network according to claim 14, wherein the data communication network comprises a direct link between the at least one routing instrument and the central computing resource.

16. (canceled)

17. (Original) A computerized information network according to claim 14, wherein the central computing resource comprises a multi-processor workstation.

18. (Original) A computerized information network according to claim 14, wherein the central computing resource comprises a networked cluster of computers.

19. (Original) A computerized information network according to claim 14, wherein the data communication protocol comprises an asynchronous protocol.

20.-21. (canceled)